



Five Steps to Gaining Control and Managing Complexity in the Data Center through Service Automation

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In the early days of the telephone, when human operators manually switched calls, it was predicted that eventually every man, woman, and child in the United States would need to provide operator service to support the rapidly growing and increasingly complex telephone network. You may have made a similar assessment of what it will take to manage your IT infrastructure.

It's like navigating through a "perfect storm." Over the last decade, IT infrastructures have become exceedingly complex, resulting in a highly interconnected network of new and powerful technologies. This complex IT network includes new technologies, such as server virtualization, as well as legacy distributed and mainframe computing environments that support millions of transactions through multi-tiered applications. Many of the day-to-day management activities supporting this complex environment are still performed manually, often with little repeatability and low reliability. In this mode of operation, even the slightest human error can cause devastating service outages that adversely affect quality of service, top-line revenues, and even a company's reputation. To make matters worse, government regulations and internal policies are demanding stricter governance and auditability. As if that were not enough, senior management is pressuring IT to reduce costs, while the complexity of the IT infrastructure seems to grow every year.

The eye of this perfect storm is the data center. To effectively manage your data center in this turbulent atmosphere, you have to navigate through territory in which the cost of mistakes can be substantial and the chance of making mistakes is increasing.



As such, you must demonstrate agility and efficiency throughout the lifecycle of change, release, and configuration management. It's also important to automate the lifecycle management of critical business services across the entire IT infrastructure, including physical and virtual servers, applications, network devices, and client systems. You must do this in an environment that is in a state of continual flux, with changing business conditions, a changing user base, and a continuing flood of patches and updates.

Fortunately, you can meet these challenges through service automation. Service automation includes a set of integrated solutions for automated configuration management. Service automation enables you to automate provisioning, patching, auditing, and remediating software across servers, network devices, and client systems in support of changing business needs. By automating these onerous tasks, you can improve

operational efficiency and gain control over service quality, security, and business agility, while simultaneously reducing risk and costs and making compliance a by-product of your processes.

In charting your course to service automation, take a deliberate and well-planned incremental approach. Address your most critical areas first, and then continue to improve those areas while adding more capabilities.

STEP 1: ESTABLISH YOUR VISION

In this step, assess your current situation and establish your vision for service automation.

- > Gain a greater understanding of your current IT operations and processes, such as provisioning and compliance
- > Identify your pain points and the key business benefits you expect to achieve

- > Begin to prioritize your initiatives based on business impact. "If IT improves 'x' process, what is the tangible business impact?"
- > Take the first steps toward developing a roadmap for implementing a service automation capability to meet your business needs

STEP 2: CREATE A MAP

Here, you assess your current operational performance against your vision to determine the gaps. Be sure to include technology, process, policy, people, and governance in your assessment. The result of this step is an approach for addressing the gaps between your current situation and your vision across all of these areas.

- > Evaluate the current state and maturity of your IT processes for such areas as change, configuration, compliance, and release management
- > Evaluate the current toolsets and technology to support processes
- > Identify potential areas of improvement in your current processes that you can address through service automation
- > Identify value drivers and predict the business benefits of the proposed solutions
- > Establish success metrics and baseline your current capabilities so that improvements are measurable and demonstrable
- > Prepare a high-level implementation plan describing the individual projects that will make up your program
- > Design your logical architecture, addressing such items as the foundation data required, the interfaces that need to be discovered, federated data, and security requirements

STEP 3: DEFINE YOUR PROGRAM

This step involves laying the foundation for the projects outlined in the map you created in Step 2. Develop a program plan that defines the processes, policies, and guidelines that will govern the implementation of each of the projects you have selected, and ensure that dependencies and relationships among each of these implementation projects are managed effectively.

The program plan should address milestones, project dependencies, deliverables, review requirements, and project resources. You also need to establish a common foundation for the program that includes service definitions, IT processes, and supporting technology architecture, as well as governance and organizational alignment strategies.

- > Define detailed implementation plans and program infrastructure in terms of personnel, roles, standards, and organizational transformation
- > Ensure that the solutions you select will support your business objectives and help you adapt to the changing needs of the business
- > Establish effective and efficient processes that help you deliver IT services in line with business expectations
- > Prepare your people for the process and technology changes that will occur

STEP 4: PUT YOUR PLANS INTO ACTION

Here, you execute the individual projects that you specified in the program plan developed in Step 3. For each project:

- > Establish goals that include key milestones and stakeholders; the key here is to have the appropriate set of phases to meet and exceed expectations
- > Define a process that outlines the required activities and tasks
- > Define a team model that identifies the people responsible for carrying out each of the tasks in the project
- > Take advantage of any tools or methods that are available to help you complete the project on time and within budget

STEP 5: MEASURE, MONITOR, AND CONTINUALLY IMPROVE

In this step, you assess your implementation against your vision to determine if you are gaining the business benefits you expect. You also use this step to continually improve your service automation initiatives.

- > Measure and evaluate the benefits realized from the projects using the metrics you established in Step 2
- > Ensure that the solutions are operated and maintained effectively
- > Continually monitor and improve upon the process, technology, organization, and governance strategies that you have implemented

REAP THE BENEFITS

With service automation, you will become more responsive to the needs of the business, providing your company a competitive edge. You will also dramatically improve IT staff productivity by automating time-consuming, but necessary, repetitive tasks, such as provisioning, patching, and auditing today's complex IT environment. Finally, you will protect your valuable knowledge by embedding this knowledge in automated processes.

Business agility is increased by speeding up such tasks as rolling out new and updated business services and applications, and onboarding new employees. By moving up to a whole new level of service automation, you can get ahead of the perfect storm.

For more information about BMC Service Automation, visit www.bmc.com/serviceautomation.

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